EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 09.08.2000 Bulletin 2000/32

(51) Int Cl.7: H05K 13/04, H05K 13/08

(11)

- (43) Date of publication A2: 24.11.1999 Bulletin 1999/47
- (21) Application number: 99303907.2
- (22) Date of filing: 19.05.1999
- (84) Designated Contracting States:

 AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

 MC NL PT SE

 Designated Extension States:

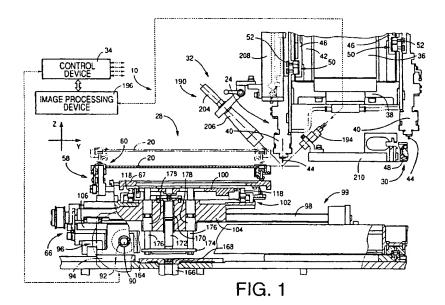
 AL LT LV MK RO SI
- (30) Promy 19.05.1998 JP 13696298
- (71) Applicant Fuji Machine Mfg. Co., Ltd. Chiryu-shi, Aichi-ken (JP)

- (72) Inventors:
 - Asai, Koichi, c/o Fuji Machine Mfg. Co. Ltd. Chiryu-shi, Aichi-ken (JP)
 - Suhara, Shinsuke, c/o Fuji Machine Mfg. Co. Ltd. Chiryu-shi, Aichi-ken (JP)
- (74) Representative: Moir, Michael Christopher et al Mathys & Squire 100 Gray's Inn Road London WC1X 8AL (GB)

(54) Method and system for mounting electric components

(57) A method of mounting a plurality of electric components on a circuit substrate and thereby producing an electric circuit, including the steps of taking, immediately before each of the electric components is mounted on the circuit substrate, a first image of a first portion of the circuit substrate on which the each electric component is to be mounted and a second portion of the circuit substrate that is adjacent to the first portion,

mounting the each electric component on the circuit substrate, taking, immediately after the each electric component is mounted on the circuit substrate, a second image of the mounted electric component and the second portion adjacent to the mounted electric component, and inspecting, by comparing the first and second images with each other, a state in which the each electric component is mounted on the circuit substrate.



BEST AVAILABLE COPY

Printed by Jouve, 75001 PARIS (FR)



EUROPEAN SEARCH REPORT

Application Number EP 99 30 3907

	DOCUMENTS CONSID	ERED TO BE RE	LEVANT		
Category	Ortation of document with it of relevant pass	ndication, where appropr sages	iate.	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	PATENT ABSTRACTS OF vol. 12, no. 192 (P 4 June 1988 (1988-0 & JP 062 298750 A (ELECTRONICS CO), 25 December 1987 (1 * abstract *	7-712), 16-04) OMRON TATEISI		1,2,6-8, 11,12	H05K13/04 H05K13/08
X	PATENT ABSTRACTS OF vol. 1995, no. 10, 30 November 1995 (1 & JP 07 183697 A (M CO LTD), 21 July 19 * abstract *	995-11-30) IATSUSHITA ELEC	TRIC IND	1,2,6-8. 11,12	
A	US 4 941 256 A (CAP 17 July 1990 (1990- * column 2, line 52	07-17)]1	1,2,6-8. 11,12	
A	US 4 978 224 A (KIS 18 December 1990 (1 * column 1, line 51	990-12-18)	1	1,8	TECHNICAL FIELDS SEARCHED (Int.CL6) H05K
	The present search report has	<u>-</u>			
	Place of search THE HAGUE	Dale of complete 16 June		Bol	der. G
X : part Y : part doc. A : tech O : non	ATEGORY OF CITED DOCUMENTS incularly relevant if taken alone incularly relevant if combined with anotiment of the same category mological background in-written disclosure mitediate document.	E: D: L: 	theory or principle the artise patent document cited in a document cited for member of the sam document.	ment, out publi the application other reasons	shed on, or

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 3907

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-06-2000

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
	062298750	A	25-12-1987	NONE		
JP	07183697	Α	21-07-1995	NONE		
	4941256	Α	17-07-1990	CA	1285661 A	02-07-199
US	4978224	A	18~12-1990	JP JP JP JP	1018004 A 1018049 A 1088204 A 1161310 A 1165903 A	20-01-198 20-01-198 03-04-198 26-06-198 29-06-198

For more details about this annex : see Official Journal of the European Patent Office. No. 12/82